CEIM64C/BEIM64C — OPERATING SYSTEMS

Time : Three hours   Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is an Operating system?

2. Define Kernel.

3. Summarize the term process state.

4. Outline the term attributes of process.

5. Pin out the advantages of Multiprogramming.

6. Why Memory Management is required?

7. List out the functions of virtual file system.

8. Outline the term disk scheduling.

9. Point out the features of Linux file system.

10. Classify the components of kernel module.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Categorize the various objectives and functions of operating systems.

Or

(b) Classify the various types of operating Systems.

12. (a) What are the major activities of operating systems with regard to process management?

Or

(b) What is a process? Explain different process states.

13. (a) Write notes on LRU-Approximation page Replacement.

Or

(b) What is virtual memory? Mention its advantages.

14. (a) Describe indexed file, indexed sequential file organization.

Or

(b) Discuss the objectives for file management systems.

15. (a) Analyze the steps involved in develop a UNIX architecture with a neat diagram.

Or

(b) Define UNIX file system. Explain UNIX file system with a diagram.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Categorize the four process control system calls.

17. Write and explain the steps in Round Robin scheduling algorithm with example.

18. Examine in detail about Best Fit, First fit and Worst fit.

19. Identify and explain the different methods for handling deadlocks.

20. Explain the mkdir, rmdir command with suitable example.

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